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雀稗亚族与类雀稗亚族新分类群

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NEW TAXA OF PASPALINAE AND PASPALISIINAE

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关键词 雀稗亚族;类雀稗亚族;竹叶草属;福建竹叶草;臂形草属;尾稃臂形草;尾稃草属;心叶尾稃草

近年编写中国植物志(禾本科)时,做了许多属的叶表皮细胞组织观察,结合其它形态特征的研究,证实耿以礼教授父子在编写《中国主要植物图说——禾本科》时所发表的雀稗亚族及类雀稗亚族的正确性,同时也认为尾稃草属 *Urochloa* Beauv. 与臂形草属 *Brachiaria* Griseb 应独立成两个属。并发现下列一些新分类群,凡耿以礼教授过去的新亚族及新种也均在本文中补写拉丁描述。

雀稗亚族(中国种子植物分科检索表附录)

Subtrib. **Paspalinae** Keng et Keng f. subtrib. nov., Clav. Fam. Spermatophyt. Sinic. Append. (中国种子植物分科检索表附录) 62. 91. 1951, Clav. Gen. & Sp. Gram. Sin. (中国主要禾本科植物属种检索表) 115. 221. 1957, nom. nud., et Fl. Illustr. Plant. Prim. Sin. Gram. (中国主要植物图说——禾本科) 637. 668. 1959, sine lat. descr.

Spiculae brevi-pedicellatae vel subsessiles, in racemos unilaterales saepissime spiciformes dispositae, raro per rhachin multo praecisam in glomerulos secus axem primum fasciculatae; racemi 2-plures raro solitarii, secus axem racemoso- vel digitato-dispositi, rhachide saepe plus minusve compressa vel triquetra, apice spiculifera.

Typus subtribus: Paspalum L.

1. **福建竹叶草**　新种　图 1

Oplismenus fujianensis S. L. Chen et Y. X. Jin, sp. nov.

O. composito (L.) Beauv. comparate propinqua, sed ex qua ramis secus axem paniculae dense dispositis, spiculis brevioribus, glumis breviaristatis vel mucronatis et vaginis pilis ad basin papillatis dense pubigeris differt.

Culmi robusti, erecti sed basi decumbentes, 40—80 cm alti. Vaginae internodiis brevioribus vel superiore longioribus, pilis ad basin papillatis dense pubigerae; ligula membrancea margine breviciliata; laminae lanceolatae vel ovato-lanceolatae, 5—10 cm longae, 1.5—2.5 cm latae, acutae, basi obliquae plus minusve amplexicaules, utrinque dense hirtulae. Panicula 10—15 cm longa, axi primo et rhachi pilis ad basin papillatis dense pubigena, ramis 2—5 cm longis; spiculae ovato-lanceolatae pilosae, 2.5—3 mm longae,

binatae raro ad basin rhachis fasciculatae; glumae herbaceae, gluma prima 1/2—2/3 longitudinem spiculae aequante 3—5-nervi, gluma secunda mucronata vel in aristam 0.5 mm longam attenuata; flosculus primus neuter, lemmate herbaceo longitudinem spiculae aequante 7—9-nervi, palea membranacea angustiore; lemma secundum cartilagineum glabrum lucidumque margine involutum, paleam isomorpha mamplactans; lodiculae 2, plicatae; styli 2, basi divaricati.

Fujian (福建): Nanjing (南靖), ad fruticum crescens, VII 2 1963, Univ. Xiamen. (厦门大学) 452 (Typus, PE)

本种靠近竹叶草 *O. compositus* (L.) Beauv. 但花序分枝上的小穗排列紧靠，小穗较小，颖片顶端的芒较短以及叶鞘密被疣基毛等特征可以区别。

2. 无芒竹叶草 新变种

Oplismenus compositus (L.) Beauv. var. **submuticus** S. L. Chen et Y. X. Jin, var. nov.

A typo praesertim differt vaginis glabris vel margine ciliatis; laminis lanceolatis vel ovato-lanceolatis, 3—8 cm longis, 8—14 mm latis; glumis submuticis vel valde breviter aristatis.

Yunnan (云南): Zhenyuan(镇沅), C. W. Wang(王启无) 8004 (Typus, JSBI); Qali (车里,今景洪县), X 1936, C. W. Wang(王启无) 78685, 78865 (JSBI, KUN); Xishuangbanna (西双版纳), sub silvis arundinis crescens, XI 6 1958, Expeditio Sin.-URSS. (中苏综考队) 164 (KUN); Funing (富宁), sub silvis, X 27 1958. H. T. Tsai (蔡希陶) 588821 (KUN); Kunming (昆明), IX 6 1977, P. Y. Chiu (邱炳云) 77942 (KUN).

Sichuan (四川): Longchang (隆昌), sub silvis crescens, alt. 1800 m, IX 6 1959, S. H. Chu (朱水清) 20222 (PE).

与原变种的明显区别为叶鞘无毛或仅边缘有纤毛;叶片披针形或卵状披针形，长 3—8 厘米，宽 8—14 毫米;颖片顶端无芒至具很短的芒。

3. 台湾竹叶草 新等级

Oplismenus compositus (L.) Beauv. var. **formosanus** (Honda) S. L. Chen et Y. X. Jin, stat. nov.——*Oplismenus formosanus* Honda in Fedde, Rep. Sp. Nov. Reg. Veg. **20**: 361. 1924 et in Journ. Fac. Sci. Univ. Tokyo Sect. III. Bot. **3**: 272. 1930, syn. nov.

Distributed in Taiwan, Guangdong, Guangxi, Sichuan, Guizhou and Yunnan.

本变种叶片及小穗的形状以及颖片具芒的长短等均在竹叶草 *O. compositus* (L.) Beauv. 的范围内，仅叶片稍长些，小穗略大些可以区别，故由种下降为变种.

4. 狭叶竹叶草 改隶新组合

Oplismenus patens Honda var. **angustifolius** (Chia) S. L. Chen et Y. X. Jin, transl. nov. —— *Oplismenus compositus* var. *angustifolius* Chia, 海南植物志 **4**: 416. 图 1218. 1971, syn. nov.

本变种小穗均单生于穗轴的特征是在疏穗竹叶草 *Oplismenus patens* Honda 的范围内，故给以改隶新组合。

5. **云南竹叶草** 新变种

Oplismenus patens Honda var. **yunnanensis** S. L. Chen et Y. X. Jin, var. nov.

A typo praesertim differt laminis lanceolatis vel anguste lanceolatis, 5—9 cm longis, 7—12 mm latis; aristis glumae et lemmatisque brevioribus.

Yunnan (云南): Qali (车里,今景洪县), alt. 840 m, X 1936, C. W. Wang (王启无) 79542 (Typus, JSBI).

Guangdong (广东): Hainan (海南), VIII 1957, S. L. Liou (刘守炉) 69 (JSBI).

本变种与原变种的主要区别为叶片披针形或狭披针形，长5—9厘米，宽7—12毫米，颖及外稃均具较短的芒。

6. **双穗求米草** 新变种

Oplismenus undulatifolius (Arduino) Beauv. var. **binatus** S. L. Chen et Y. X. Jin, var. nov.

A typo praesertim differt spiculis ad axem paniculae binatis, lemmatibus primis 5—7-nervibus.

Jiangsu (江苏): Shanghai (上海), Sheshan (佘山), X 29 1931, H. Migo (Typus, JSBI); Minhang (闵行) XI 17 1933, H. Migo (JSBI).

Zhejiang (浙江): Putuo (普陀), X 14 1935, H. Migo (JSBI).

Anhui (安徽): Fanchang (繁昌), P. Courtois 1623 (JSBI).

本变种与原变种的主要区别为花序轴各节均为2小穗，第一外稃具5—7脉等特征。

7. **光叶求米草** 新变种

Oplismenus undulatifolius (Arduino) Beauv. var. **glaber** S. L. Chen et Y. X. Jin, var. nov.

A typo praesertim differt culmis altioribus, vaginis glabris vel margine ciliatis, spiculis ad axem paniculae binatis.

Anhui (安徽): Xiao Xian (萧县), VII 14 1958, F. X. Liou (刘昉勋) 10126 (Typus, JSBI).

Sichuan (四川): Emei (峨眉), VIII 18 1928, alt. 4500—5000 m, W. P. Fang (方文培) 3137 (JSBI).

与原变种的主要区别为叶鞘无毛，或仅边缘有毛，小穗在花序轴上双生。

8. **尾稃臂形草** 新种 图2

Brachiaria urocoides S. L. Chen et Y. X. Jin, sp. nov.

Haec species lemmate secundo mucronato insignis, sed gluma prima adaxiali et epidermibus foliorum utrinque similibus speciebus hujus generis affinis.

Culmi 40—60 cm alti, sed basi decumbentes. Vaginae glabrae vel pilis ad basin papillatis pubigerae, margine externo ciliatae; ligula margine breviciliata; laminae lineari-lanceolatae, 5—9 cm longae, 3—5 mm latae, utrinque pilis ad basin papillatis pubigerae. Panicula glabra sed secus axem hirsuta, ramis 2—4, 1.5—3 cm longis; spiculae lanceolatae circ. 4 mm longae, subglabrae, binatae vel ad partem supernam rhachis solitariae, pedicellis pilis ad basin papillatis longi-hirsutis; gluma prima 3—5 -nervis,

1/2—3/5 longitudinem spiculae aequans, gluma secunda 5—7-nervis spiculam aequans; flosculus primus neuter, lemmate 5-nervi glumae secundae simili; lemma secundum circ. 2.5 mm longum, rugulosum, apice mucronatum, margine involutum, paleam isomorpham amplactans; lodiculae 2, plicatae, nervatae.

Yunnan (云南): Regio australis, 1956, S. L. Liou (刘守炉) sine num. (Typus, JSBI).

本种的第二外稃顶具小尖头,在本属中很少见,但其第一颖向轴而生,叶表皮细胞结构均似本属内一些种类。

9. **刺毛臂形草** 新变种

Brachiaria subquadripara (Trin.) Hitchc. var. **setulosa** S. L. Chen et Y. X. Jin, var. nov.

A typo praesertim differt vaginis laminis et spiculis dense puberulis; axi paniculae glabro sed scabroso, rhachillis longe hirtis.

Yunnan (云南): Yongsheng (永胜), ad declivitatem crescens, alt. 1550-1610 m, VIII11-18 1981, Jinsha Jiang Exped. (金沙江队) 77183, 77284 (Typus, JSBI).

与原变种主要区别为叶鞘、叶片及小穗密被柔毛,小穗轴被长刺毛,花序主轴无毛,但粗糙。

10. **锐尖臂形草** 新等级

Brachiaria subquadripara (Trin.) Hitchc. var. **miliiformis** (Presl) S. L. Chen et Y. X. Jin, stat. nov.—— *Panicum miliiformis* Presl ex C. Presl Rel. Haenk. **1:** 300. 1830.—— *Brachiaria miliiformis* (Presl) Chase in Contr. U. S. Nat. Herb. **22:** 35. 1920; Bor. Grass. Burm. Ceyl. Ind. Pakist. 283-284. 1960, syn. nov.

本种植株形状,小穗单生及其形状等均在四生臂形草 *B. subquadripara* (Trin.) Hitchc. 范围内,故降为变种。

11. **无毛臂形草** 新变种

Brachiaria villosa (Lam.) A. Camus var. **glabrata** S. L. Chen et Y. X. Jin, var. nov.

A typo praesertim differt culmis 50—60 cm altis, vaginis laminisque glabris.

Yunnan (云南): Cangyuan (沧源), ad pratum crescens, X 8 1979, C. H. Hu (胡志浩) 7900562 (Typus, JSBI); Yongsheng (永胜), ad declivitatem crescens, VIII 17—18 1981, Jinshajiang Exped. (金沙江队) 77270, 77114, 77283 (YUNU); Zhenkang (镇康), ad locam siccan crescens, IX 15 1979, C. H. Hu (胡志浩) 7900505 (YUNU); Qali (车里, 今景洪县), alt. 800 m, IX 1936, C. W. Wang (王启无) 76711 (PE); Yingjiang (盈江), ad latus viae, VII 9 1977, Yunnan University Expep. (云南大学) 77175 (YUNU); Heqing (鹤庆), ad locam desertam crescens, VIII 14 1963, Jinsha Jiang Exped. (金沙江队) 6525 (YUNU).

与原变种主要区别为植株高 50—60 厘米,叶鞘及叶片无毛。

12. **心叶尾稃草** (中国主要禾本科植物属种检索表)

Urochloa cordata Keng, sp. nov., Clav. Gen.& Sp. Gram. Sin. (中国主要禾本科植

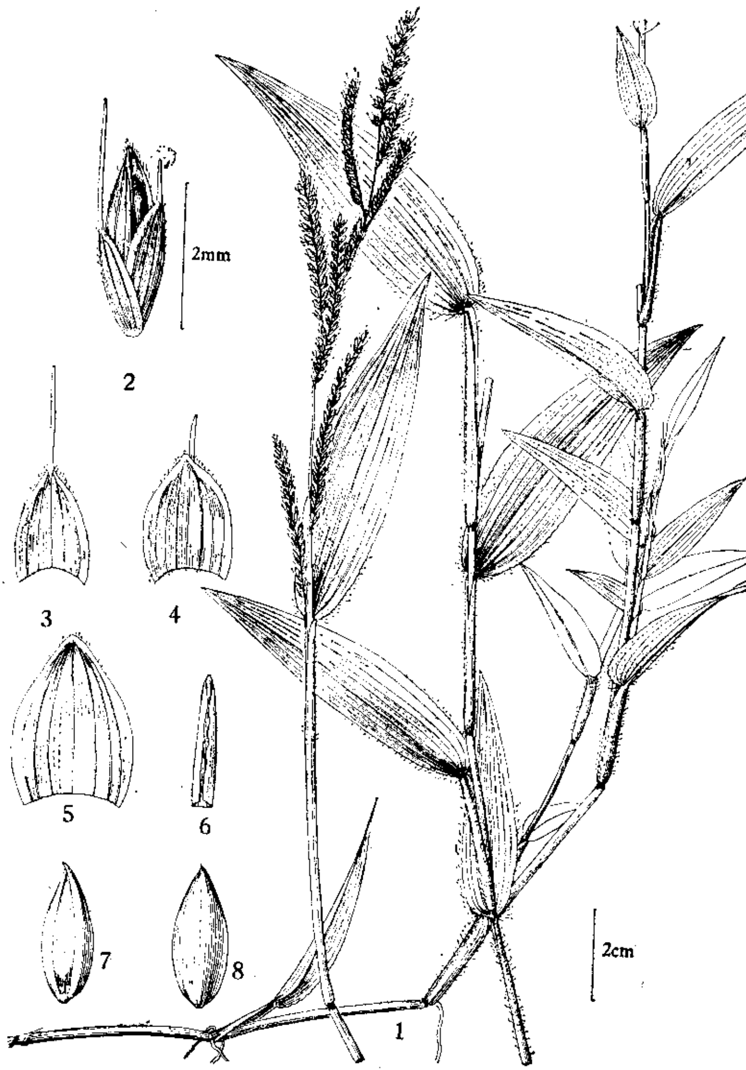


图 1　福建竹叶草 *Oplismenus fujianensis* S. L. Chen et Y. X. Jin

1. 植株 plant; 2. 小穗 spikelet; 3. 第一颖(腹面) lower. glume in ventral view; 4. 第二颖(腹面) upper glume in ventral view; 5. 第一外稃 lemma of the lower floret; 6. 第一内稃 palea of the lower floret; 7. 第二小花 (腹面) upper floret in ventral view; 8. 第二小花(背面) upper floret in dorsal view. (陈荣道绘)

物属种检索表) 122, 224. 1957. nom. nud. et Fl. Illustr. Plant. Prim. Sin. Gram. (中国主要植物图说——禾本科) 679. f. 632. 1959, sine lat. descr.

Affinis *U. reptanti* (L.) Stapf. sed spiculis longioribus pubescentibus differt.

Culmi super 1 m alti, infra inflorescentiam vel ad internodia breviter pilosi, nodis barbatis. Vaginae pilis ad basin papillatis pubescentes, plerumque internodiis breviores; ligulae breves, pilis 1—2 mm longis dense ciliatae; laminae ovato-lanceolatae, basi cordatae amplexicaulesque, 2—10 cm longae, 2—2.5 cm latae, leviter undulatae, utrinque dense minute pubescentes, margine scabrae, basin versus gradatim ciliatae. Racemi 7—

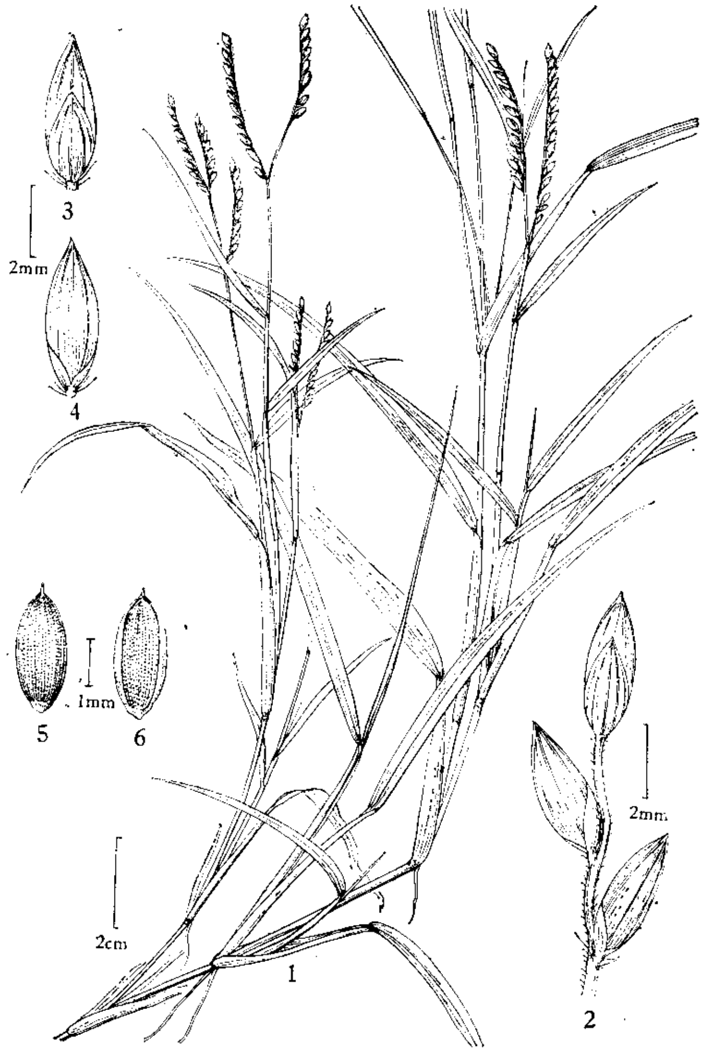


图 2 尾稃臂形草 *Brachiaria urocoides* S. L. Chen et Y. X. Jin

1. 植株 plant; 2. 总状花序(一部分) the part of raceme; 3. 小穗(背面) spikelet in dorsal view; 4. 小穗(腹面) spikelet in ventral view; 5. 第二小花 (背面) upper floret in dorsal view; 6. 第二小花(腹面) upper floret in ventral view. (史渭清绘)

9, 1.5—4 cm longi, rhachi pilis ad basin papillatis pubescenti, in panciculam circ. 10 cm longam dispositi; spiculae plerumque binae, 4—5 cm longae, apice acuminatae, dense breviter villosae; pedicelli breves, pilis paucis rigidis ad basin papillatis praediti; gluma prima minuta, 1/5 spiculae subaequans, late triangularis, apice obtusa; gluma secunda spiculam aequans, 7-nervis; lemna primum gluma secunda paullo brevior, 5—7-nerve; palea lemmate paullo brevior nonnumquam antheris predita; lemma secundum ellipticum, circ. 2 mm longum, dorso leviter rugulosum, apice mucrone circ. 0.2 mm longo instructum.

Guangdong (广东): Hainan (海南), Ya Xian (崖县), in silva crescens, VIII 20 1933, C. Wang (黄志) 33805 (Typus, SYS).

靠近尾稃草 *U. reptans* (L.) Stapf.，但小穗较大，且具柔毛等特征有异。

13. **光尾稃草** 新变种

Urochloa reptans (L.) Stapf. var. **glabra** S. L. Chen et Y. X. Jin, var. nov.

A typo praesertim differt rhachibus et pedicellis glabris.

Yunnan (云南): 1956, S. L. Liou (刘守炉) 7 (Typus, JSBI); Xiaomengyin (小勐养), X 9 1960, B. S. Sun (孙必兴) 780 (YUNU)。

与原变种主要区别为穗轴及小穗柄上无疣基长硬毛。

类雀稗亚族(中国主要禾本科植物属种检索表)

Subtrib. **Paspalidiinae** Keng et Keng f., subtrib. nov., Clav. & sp. Gram. Sin. (中国主要禾本科植物属种检索表) 113, 229. 1957, nom. nud. et Fl. Illustr. Plant. Prim. Sin. Gram. (中国主要植物图说——禾本科) 636, 718. 1959, sine lat. descr.——Setarinae Keng et Keng f. Clav. Fam. Spermatophyt. Sinic. Append. (中国种子植物分科检索表附录) 62, 88. 1951, p. p.

Spiculae ut in subtrib. *Paspalinis* subsessiles in racemos vel spicas unilaterales dispositae, sed a qua spicula suprema sterili et rhachi producta differt.

Typus subtribus: Paspalidium Stapf.

Abstract Our observation of the leaf epidermis of many species in Gramineae shows that Paspalinae Keng & Keng f. (nom. nud.) and Paspalidiinae Keng & Keng f. (nom. nud.) are two good subtribes, and the characters of the genus *Brachiaria* Griseb. are quite different from those of the genus *Urochloa* Beauv. The Latin descriptions of new taxa are given in this paper, These are subtrib. Paspalinae Keng & Keng f., *Oplismenus fujianensis* S. L. Chen & Y. X. Jin, *O. compositus* var. *submuticus* S. L. Chen & Y. X. Jin, *O. patens* var. *yunnanensis* S. L. Chen & Y. X. Jin, *O. undulatifolius* var. *binatus* S. L. Chen & Y. X. Jin, *O. undulatifolius* var. *glabrus* S. L. Chen & Y. X. Jin, *Brachiaria urocoides* S. L. Chen & Y. X. Jin, *B. subquadripara* var. *setulosa* S. L. Chen & Y. X. Jin, *B. villosa* var. *glabrata* S. L. Chen & Y. X. Jin, *Urochloa cordata* Keng, *U. reptans* var, *glabra* S. L. Chen & Y. X. Jin and subtrib. Paspalidiinae Keng & Keng f..

Key words Paspalinae; Paspalidiinae; *Oplismenus; O. fujianensis; Brachiaria; B. urocoides; Urochloa; U. cordata*